

#### BEFORE THE FEDERAL COMMUNICATIONS COMMISSION WASHINGTON, D.C. 20554

In the Matter of		
	)	
Joint Application by BellSouth	)	
Corporation, BellSouth	)	CC Docket No. 02-35
Telecommunications, Inc., and BellSouth	)	
Long Distance, Inc. for Provision of In-	)	
Region, InterLATA Services Georgia	)	
And Louisiana	)	
	)	

# SUPPLEMENTAL DECLARATION OF MICHAEL LIEBERMAN ON BEHALF OF AT&T CORP.

#### I. BACKGROUND AND SUMMARY

- 1. My name is Michael R. Lieberman. I am the same Michael R. Lieberman that submitted testimony on October 19, 2001 in response to BellSouth's first joint Section 271 application for Georgia and Louisiana. The purpose of my supplemental testimony is to update the data in my analysis showing that BellSouth's UNE rates in Georgia and Louisiana are substantially overstated.
- 2. As I demonstrate below, BellSouth's Georgia and Louisiana non-loop rates, by BellSouth's own admission, are far above TELRIC levels. I also show that BellSouth's Georgia daily usage file (or "DUF") charge is far above TELRIC levels. Indeed, the DUF charge on which BellSouth's Georgia Section 271 application is predicated is more than double that recently proposed by BellSouth itself in Georgia (in a separate UNE rate proceeding).
- 3. One reason why the BellSouth Georgia non-loop related rates are inflated is that those rates are based on outdated pre-1997 data. As I demonstrate below, BellSouth's Georgia switch-related costs (which are the primary component non-loop charges) have declined

dramatically since then. Therefore, even if BellSouth's Georgia rates approximate 1997 forward-looking costs (and BellSouth has not established that they do), those rates far exceed 2002 forward-looking costs. As I demonstrate below, a similar phenomenon inflates BellSouth's DUF rates.

- 4. In addition, my analysis of BellSouth's Louisiana rates shows that the conditions necessary to support residential competitive entry in that state do not exist because BellSouth's Louisiana UNE rates are far too high to support mass-market UNE-P retail offerings. This result holds true even when all revenues and benefits that could be incrementally obtained from providing UNE-based local services (*e.g.*, the sale of vertical services) are considered.
- 5. There are no other feasible entry alternatives available to CLECs in Louisiana. Resale is not a feasible alternative because the margins available to resale entrants are not sufficient to support residential entry. Nor is residential UNE-L an economically or practically feasible entry alternative to UNE-P in Louisiana.

# II. BELLSOUTH'S GEORGIA NON-LOOP AND DUF RATES ARE VASTLY INFLATED ABOVE TELRIC LEVELS.

6. BellSouth's Georgia Section 271 Application is predicated on non-loop rates that yield total non-loop charges of \$6.83/line/month. *See* Exhibit A-1 (attached). BellSouth, citing changes in costs, *proposed* new non-loop rates in October 2001 and again in February 2002 in an ongoing UNE rate proceeding before the Georgia Public Service Commission ("GPSC"). BellSouth claims that these proposed non-loop rates are TELRIC-compliant. BellSouth's

<sup>&</sup>lt;sup>1</sup> The total per line non-loop related charge includes the end office line-side ports and usage, as well as end office trunk ports, and transport elements. *See* Exhibit A-2 (attached). The per line charge was computed by applying the Commission's usage profiles for benchmarking purposes as defined in its *Pennsylvania 271 Order*, n.252. *See id.* This charge does not include DUF charges.

February 2002 proposed non-loop rates result in non-loop charges of \$3.78.<sup>2</sup> Thus, if BellSouth is correct in stating that its February 2002 proposed non-loop rates are TELRIC-compliant, then the non-loop charge on which its Section 271 application is predicated exceeds today's TELRIC levels by 81%. *See id.* 

- 7. The DUF rates in BellSouth's Application also are substantially overstated. The DUF rates relied on by BellSouth in its Georgia Application result in recurring DUF charges of \$2.96. BellSouth has effectively conceded that those rates are too high. The DUF rates contained in BellSouth's two recent proposals to the GPSC in the ongoing rate proceeding produce recurring DUF charges of \$1.40. See Exhibit B-1. That DUF charge is more in line with the \$1.37 DUF charge BellSouth implemented in Louisiana last December. See Exhibit B-1.
- 8. One reason why BellSouth's non-loop rates are so overstated is that the switching rates (which are the predominant component of the non-loop charges) in BellSouth's Application are based on 1997 and earlier data. Since then, BellSouth's Georgia switching costs have plummeted, a fact that this Commission has already recognized.<sup>3</sup> BellSouth's ARMIS data

This \$3.78 non-loop charge does not reflect BellSouth's feature port additive charge ("FPA") of \$2.27. As I explained in my initial testimony, that charge is inappropriate and has in the past been rejected by both the GPSC and the Louisiana Public Service Commission ("LPSC"). See Lieberman Initial Decl. ¶ 9. In any event, even with the FPA charge, the non-loop charge in BellSouth's Application still exceeds its newly proposed non-loop charge by 13%. See Exhibit A-1 (attached).

<sup>&</sup>lt;sup>3</sup> See, e.g., Order on Remand and Report and Order, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 and Intercarrier Compensation for ISP-Bound Traffic, CC Dockets No. 96-98 and 99-68, FCC 01-131, at 84, n. 157, 93 (April 27, 2001) (citing Letter from David J. Hostetter, SBC, to Magalie Roman Salas, Secretary, FCC (Feb. 14, 2001), Attachment (citing September 2000 Morgan Stanley Dean Witter report that discusses utilization of lower cost switch technology); Donny Jackson, "One Giant Leap for Telecom Kind?," Telephony, Feb. 12, 2001, at 38 (discussing cost savings associated with replacing circuit switches with packet switches); Letter from Gary L. Phillips, SBC, to Magalie Roman Salas, Secretary, FCC (Feb. 16, 2001) (attaching press release from Focal Communications

illustrates this point. Analysis of BellSouth's Georgia net switch investments and its dial equipment minutes ("DEMs") shows that net switch investments have declined on a per-minute-of-use basis for the past several years and that net switch investment has grown much slower than DEMs. The slow growing net switch investment, combined with the explosive increase in minutes, results in a 40% decline in net switching investment per DEM between 1996 and 2002. See id.<sup>4</sup> Likewise, BellSouth's outdated and understated demand assumptions underlying its DUF rates severely overstates those rates. If BellSouth had used more current demand assumptions, BellSouth's DUF rates would reflect the fact that its relatively fixed DUF investment could be spread over a higher level of demand.

9. Based on this evidence, the non-loop and DUF rates relied on by BellSouth in its Georgia Application are substantially overstated.

# III. BELLSOUTH'S LOUISIANA UNE NON-LOOP RATES ARE VASTLY INFLATED ABOVE TELRIC LEVELS AND FORECLOSE PROFITABLE UNE-PENTRY.

10. BellSouth's Louisiana non-loop rates also are substantially inflated above TELRIC levels. BellSouth's Louisiana total non-loop charges are 81% higher than those it recently proposed in Georgia, even though, according to the Commission's Synthesis Cost Model, Louisiana's non-loop costs are only 19% higher than in Georgia. *See* Exhibits A(1-3).

announcing planned deployment of next-generation switching technology "at a fraction of the cost of traditional equipment").

<sup>&</sup>lt;sup>4</sup> A similar analysis shows that BellSouth's loop costs have also declined during the past few years. A simple analysis of BellSouth's Georgia net cable and wire ("C&W") investments and its access lines reveals that net C&W investments declined significantly on a per-line basis between 1992 and 2000. In fact, between 1996 and 2000, net C&W investment grew much more slowly than access lines, resulting in an overall decline in net investment per line of 59% from 1996 to 2002. When circuit equipment is reflected in conjunction with the C&W accounts, the decline is 50%. The overall loop decline should be between these two numbers. Because BellSouth's UNE loop rates do not reflect these decreased costs, those rates are not appropriate forward-looking cost-based rates. See Exhibit C-2 and C-3 (attached).

As I demonstrated in my initial declaration (¶¶ 11-27 & Exhibits 6-14), these overstated UNE rates foreclose profitable entry in Louisiana. Based on more recently obtained data, it is clear that BellSouth's rates continue to foreclose residential UNE-P entry in Louisiana.

- 11. The viability of a UNE-based offering that is, whether it makes sense for AT&T (or any other entrant) to commit its shareholders' capital to that enterprise turns on the same type of analysis as any other investment decision. Capital is scarce and must be devoted to its highest-valued uses. Thus, a carrier considering whether to enter the local services business in a state (or to continue to participate in that business) must determine whether revenues attributable to the service will exceed the costs of providing the service by an amount sufficient to generate a return that is commensurate with the expectations of investors concerning risks and returns and with competing uses for the capital.
- 12. There are essentially three steps to this analysis: (1) identifying and estimating each of the costs of providing the service, (2) identifying and estimating each of the revenue opportunities that will be generated by providing the service, and (3) deriving from these estimated "cash flows" some standard financial measure that allows the investment opportunity to be assessed (and compared to alternative investment opportunities).
- 13. Because telecommunications carriers are subject to numerous reporting requirements, obtaining the inputs necessary to conduct my analysis was straightforward. Carrier-specific data, including retail local service prices, UNE prices, and access prices are largely publicly reported and directly verifiable. I am confident, therefore, that the following analysis paints an accurate picture of the barrier that BellSouth's UNE prices in Louisiana pose to residential competition in that state.

- 14. The remainder of this section is organized as follows. First, I describe the costs associated with a residential UNE-Platform offering in Louisiana. Second, I describe the revenues that are available to carriers serving customers in Louisiana. Third, I translate these cash flows into margins by looking at the difference in a Louisiana entrant carrier's revenues and costs a type of financial measure commonly used by businesses to make investment decisions. This margin analysis shows that profitable UNE-Platform-based offerings cannot be undertaken by competitive carriers in Louisiana at the rates contained in BellSouth's application. Exhibits D-1 through D-9 to my declaration summarize the results of my cost, revenue and margin analyses and show how those values were computed.
- 15. **Costs.** There are two basic categories of costs associated with UNE-Platform-based services: (1) "connectivity" costs (*i.e.*, the costs associated with purchasing the necessary network elements from the incumbent), and (2) a carrier's own internal costs of running a local telephone service business (*e.g.*, developing, maintaining and operating computer support systems, as well as marketing, customer care, and administration). My analysis focuses primarily on the former category of costs, which are readily identifiable and verifiable.
- 16. The rates for UNE loops are \$11.77/month in Zone 1, \$22.39 in Zone 2, and \$48.26 in Zone 3. For UNE switch ports, new entrants pay \$1.36/month in all zones. These and the other relevant BellSouth Louisiana rates are listed in Exhibit D-2.
- Most other network local service rates are incurred based on usage (e.g., a per minute basis or a per record basis). Therefore, it is necessary to multiply the usage rates by the corresponding usage volumes to estimate the monthly per line cost that will be incurred by carriers for those elements. BellSouth's local usage volumes are available from its annual "dial equipment minutes" ("DEM") submissions to NECA and ARMIS (the same data that is used in

the Commission's Synthesis Cost Model). The most recent submission contains 2000 data. I used 1998 through 2000 NECA and ARMIS data to project BellSouth's 2002 DEM. *See* Exhibit D-3. Because the NECA and ARMIS data do not identify residential-specific toll-related minutes, I used residential toll volumes per line derived from the TNS Telecoms (formerly PNR) Bill Harvesting market research. These toll volumes and the calculations for local usage are detailed in Exhibit D-3 (attached).<sup>5</sup>

18. For each category of usage (*i.e.*, local, intraLATA toll, intrastate InterLATA, and interstate InterLATA) particular network architecture assumptions must be made. Specifically, local usage for each category must be apportioned between "Intraswitch" local volumes (where the calling and called parties are served by the same switch) and "Interswitch" local volumes (where the calling and called parties are served by different switches). My analysis assumes that 35 percent of local volumes in BellSouth's network are Intraswitch and that the remaining 65 percent of local volumes are Interswitch. *See* Exhibit D-4.<sup>6</sup> The 65 percent of local volumes that are Interswitch must be further divided among those that are routed directly between two switches and those that are routed via a tandem switch. My analysis uses the same proportions for this traffic as the Commission's Synthesis Cost Model. Specifically, according to the

<sup>&</sup>lt;sup>5</sup> Because Louisiana has not adopted a bill-and-keep mechanism, the LEC to CLEC terminating local traffic is assumed to net out to zero, and only *originating* local traffic and its corresponding terminating traffic are used to compute costs. *See* Exhibit D-4. Specifically, UNE purchasers must pay switching, transport and related usage charges for access-related usage whether a call is originated or terminated by their customer, and the assumption is that the customer receives as much access traffic as he or she originates. For IntraLATA toll traffic, every originating minute is associated with a terminating minute to another customer (for simplicity assumed to be served by the same ILEC) in the ILEC's service area.

<sup>&</sup>lt;sup>6</sup> Although the Commission's Synthesis Model recognizes that about 50 percent of local calls would be Intraswitch calls in an efficiently designed network with properly sized switches, the relevant figure for a new entrant contemplating entry is what it will actually pay BellSouth. Because BellSouth's existing network is not efficiently designed and sometimes uses two

Commission's Synthesis Cost Model, approximately 2 percent of local Interswitch minutes and 20 percent of IntraLATA toll and InterLATA minutes are tandem-routed. *See* Exhibit D-4.

- 19. After the usage minutes have been apportioned, those minutes are multiplied by BellSouth's rates for each of those elements. These calculations are shown in Exhibit D-5, which shows that total monthly usage charge per line is \$5.62. See id.
- 20. In addition, as shown in Exhibit D-6, BellSouth's Louisiana DUF charges amount to \$1.02/month. This figure is a function of the number of ADUF and ODUF records multiplied by a set of per record rates. *See Ex Parte* Letter from Christopher T. Shenk, AT&T, to Magalie Roman Salas, FCC Secretary, CC Docket No. 01-277 (filed Nov. 2, 2001) (providing detailed explanation of DUF charge computations).
- DUF) incurred by a CLEC to serve a Louisiana customer is \$24.97. This is an average of the monthly connectivity costs for Zone 1 (\$19.77), Zone 2 (\$30.39), and Zone 3 (\$56.26) weighted by the relative number of estimated residence lines in each zone served by BellSouth. *See* Exhibit D-1. When the BellSouth Louisiana non-recurring charges (including OSS charges) of \$41.83 for new customers (assumed to be 10% of CLEC orders)<sup>7</sup> and \$3.08 for migration (assumed to be 90% of CLEC orders) are added, the additional cost for the non-recurring charges is \$0.19. Therefore, the average total monthly platform cost in Louisiana is \$25.16. *See* Exhibit D-1.
- 22. **Revenues.** The BellSouth local service rates that UNE-Platform-based providers can obtain for their services are effectively capped by the retail rates charged by BellSouth. If

switches where one would be more efficient, the 35 percent figure must be used to determine expected connectivity costs that will be billed by BellSouth to the competing carrier.

new entrants attempt to charge higher rates than BellSouth, these new entrants would be unable to attract customers. BellSouth local service rates are readily available and verifiable from many sources, including CCMI. Mapping the local rates to wire centers and mapping the wire centers to UNE zones results in CCMI rates that range from \$11.36/month in Zone 3 to \$12.57/month in Zone 1.8

- 23. There are, of course, other incremental revenue opportunities available to new entrants to local services. A local service provider can expect to sell vertical features to many customers. The rates that new entrants are likely to obtain for these services can be determined from BellSouth's tariff rates for these services. Based upon average of 4Q00 to 3Q01 TNS Telecoms Bill Harvest market research data, a new entrant in Louisiana can expect, on average, to receive about \$9.60/month in vertical feature revenue. The federal Subscriber Line Charge brings in an additional \$5.00/month/line. Total expected customer revenues, therefore, average about \$26.89/line/month. *See* Exhibit D-1.
- 24. A UNE-Platform-based provider also earns access revenues (or attains savings) for originating and terminating long-distance calls. This revenue may either be explicit (when a CLEC charges an independent IXC, or implicit if the CLEC acts as its own IXC). To estimate these access revenues it is necessary to multiply expected toll minutes (derived from the TNS Telecoms Bill Harvest data) by the relevant access charges that AT&T can replace with UNEs.<sup>9</sup>

<sup>&</sup>lt;sup>7</sup> Because our experience is that a much larger percent of orders incur the more expensive new order charge, the 10% assumption is extremely conservative.

<sup>&</sup>lt;sup>8</sup> These values reflect the Flat Rate Monthly Individual Line Charge as reported by CCMI Rate Information, BellSouth Local Exchange Rates (effective October 3, 2000) and are listed in Exhibit D-8 (attached).

<sup>&</sup>lt;sup>9</sup> Dedicated transport access charges are not included because AT&T does not avoid these access charges through its acquisition of a UNE-P local customer.

My calculations show that a UNE-Platform entrant's estimated access charge revenues are \$0.90/line/month. See Exhibit D-7.

- 25. Summing all of these revenues, AT&T (or another entrant) could expect to receive \$27.80/line/month from residential UNE-based service in BellSouth (or between \$26.87 and \$28.08/line/month, depending upon the density zone).
- 26. **Margin.** There are many standard financial measures for assessing the profitability of investing (or continuing) in a line of business. The margin per line can be computed by comparing a carrier's expected costs with its expected revenues for each line. A "gross" UNE-P margin can be determined by subtracting expected direct connectivity costs from expected revenues. A "net" UNE-P margin can only be determined by subtracting all expected costs (e.g., marketing, customer service, billing, order processing, and other operating activities) from expected revenues, which usually amount to over \$10 per line. See Bickley Decl., ¶¶ 1-8.
- 27. This margin analysis for Louisiana shows that residential gross margins in Louisiana are *negative* in two of the three UNE zones in Louisiana (negative \$3.38 in zone 2 and negative \$29.58 in zone 3). *See id.* Thus, residential UNE-based entry is not possible in Louisiana. Even though there is a positive gross margin in zone 1 (\$8.12), that amount is not sufficient to cover any potential entrant's internal costs of operating a local telephone business, which, as noted above, typically exceeds \$10. In any case, statewide gross margins for Louisiana are a paltry \$2.63. Thus statewide residential UNE-based entry would not be profitable in Louisiana. *See id.*
- 28. BellSouth has criticized my margin analysis because it does not account for IntraLATA toll revenues. *See* Ruscilli/Cox Decl. ¶ 20. But IntraLATA services can be provided by carriers and in many cases are already provided by carriers without entering Louisiana's

local telephone markets. Accordingly, revenues from those services are not properly attributable to local telephone entry and are not relevant to the determination of whether revenues associated with entry into the local telephone market would exceed the costs of that entry by a sufficient margin to make local entry economically viable.

- 30. BellSouth also asserts that my margin analysis fails to account for interstate access revenues. That is wrong. As shown in Exhibit D-7, my analysis accounts for the \$0.34 of interstate access revenues that new entrants in Louisiana can expect to obtain in the residential market.
- 31. Lastly, BellSouth points to a margin analysis conducted by another AT&T witness (Mr. Gillan) in another proceeding which shows greater margins than I find here. BellSouth thus accuses me of "manipulating" data. *See Ruscilli/Cox* ¶ 20-21. That accusation is spurious. BellSouth's comparison of Mr. Gillan's and my margin analyses is inapposite.
- 32. The analysis conducted by Mr. Gillan was aimed at determining the margins that are available to *incumbent LECs*. Accordingly, Mr. Gillan included in his analysis all revenues that are available to LECs. By contrast, my analysis aims at identifying incremental margins that are available to competitive LECs that choose to enter Louisiana. Therefore, my analysis

focuses only on those revenues that become available to competitive LECs upon entry into Louisiana.

- 33. Another important reason that the results of my margin analysis differ from those of Mr. Gillan's analysis is that Mr. Gillan's margin analysis is based on 1993/1994 data, whereas my analysis is based on current data. Because access rates have fallen by more than 500% since 1994, <sup>10</sup> it is not surprising that the access revenues reflected in Mr. Gillan's margin analysis are higher than those reflected in my margin analysis.
- 34. For all of these reasons, BellSouth's criticisms of my margin analysis are misplaced and should be rejected.

# IV. RESALE AND UNE-L ENTRY IN LOUISIANA ARE NOT FEASIBLE ENTRY ALTERNATIVES FOR NEW ENTRANTS.

- 35. BellSouth suggests that the fact that its UNE-P rates preclude residential entry is irrelevant because potential competitors have other modes of entry available to them. *See* BellSouth Supp. App. at 40. According to BellSouth, even without the UNE-platform, it would still be economically feasible for entrants to provide local residential services in Louisiana through resale or a UNE-loop facilities-based approach. BellSouth is again wrong.
- 36. Resale. In Louisiana, entrants can purchase residential lines from BellSouth at a 21% discount from the retail rates for those lines. The average retail revenue for a line in Louisiana is about \$21.89. That means that a local entrant in Louisiana can purchase those lines for resale for \$17.36. The gross margin that is available to local residential resale entrants in Louisiana is the difference between the retail rate for that line and the discounted rate for that

<sup>&</sup>lt;sup>10</sup> According to Table 1.2 of the FCC trends report, per CM access rates in 1994 averaged 6.89 cents, whereas the most recent CM access rate is 1.71 cents per CM.

line, *i.e.*, \$21.89 - \$17.36 = \$4.54. That margin does not even come close to covering the entrant's \$10.00+ internal costs of providing those services. Thus, resale is not an economically feasible alternative to UNE-P for provision of local exchange services to residential customers.

- 37. *UNE-Loop.* The only facilities-based alternative to UNE-P in Louisiana would be a UNE-loop strategy in which entrants attempt to provide residential service by leasing unbundled loops from BellSouth and combining them with the entrants' own switches to provide local residential service. The costs and administrative difficulties of such an entry strategy, however, make UNE-loop entry economically infeasible for new entrants pursuing typical residential customers. In its *UNE Remand Order* (¶¶ 254-258), 12 the Commission itself recognized that entrants could not rationally invest in switches until they have used UNE-P to build up a customer base. As discussed above, Louisiana entrants cannot build up such a customer base because BellSouth's Louisiana UNE rates preclude profitable UNE-platform entry.
- 38. More fundamentally, entrants could not rationally enter Louisiana with a UNE-loop based strategy because the costs of provisioning UNE-loop and connecting them to entrants' switches make mass-market residential UNE-loop entry economically infeasible. BellSouth has not deployed a technology that allows customers to change electronically from one local exchange carrier (*e.g.*, BellSouth) to another local exchange carrier (*e.g.*, a new entrant) at no or minimal cost. Instead, the change requires entrants to purchase a "hot cut." Even if,

<sup>&</sup>lt;sup>11</sup> Unlike UNE-P entrants, resellers do not receive SLC revenues and also cannot generate access revenues (or savings) form exchange access service.

<sup>&</sup>lt;sup>12</sup> Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Third Report and Order, 15 FCC Rcd. 3696, ¶ 260 (1999); see also Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Comments of AT&T Corp., Affidavit of C. Michael Pfau, ¶¶ 11-23 CC Docket No. 96-98 (filed May 1999).

<sup>&</sup>lt;sup>13</sup> See id.

contrary to prior experience, hot cuts could be performed in mass-market volumes and were performed in a timely manner so they did not cause outages for substantial numbers of customers, the hot cut charges for each new customer, combined with additional collocation and transport costs that the ILEC does not incur, make a UNE-loop strategy, at best, only economic for business customers, not for residential customers. 14 That is especially true because the substantial turn-over (or "churn") rate associated with the provisioning of competitive local residential services will likely make it impossible for carriers to recover their up-front costs of providing UNE-loop services (including hot cuts) given the expected retention period of residential customers. Thus, AT&T has not used UNE-loop to provide basic local residential service to customers anywhere in the country. Beyond that, because BellSouth and other BOCs have been unable effectively to provision hot-cuts, even in relatively small quantities, in a timely manner and without causing outages for substantial numbers of customers, AT&T generally no longer initially serves even new small business customers with UNE-L. Instead, it initially serves most new small business customers through UNE-P - and is seeking to develop procedures in which incumbents will move large groups of AT&T customers from the incumbent's switch to an AT&T switch on a project basis. 15

#### V. CONCLUSION

39. For the foregoing reasons, it is clear that BellSouth's Georgia and Louisiana rates are significantly overstated and create a price squeeze that precludes competitive entry.

<sup>&</sup>lt;sup>14</sup> See id.

<sup>&</sup>lt;sup>15</sup> See, e.g., Performance Measurements and Standards for Unbundled Network Elements and Interconnection, AT&T Comments, CC Docket No. 01-318, Sczepanski Decl. (filed January 22, 2002).

#### **VERIFICATION PAGE**

I, Michael Lieberman, declare under penalty of perjury that the foregoing is true and correct.

Mulial Lule
Michael Lieberman

Executed on March 4, 2002.

# **Cost Adjusted Total Non-Loop Charges**

**FCC Volumes** 

Company	State	Total Non- Loop Charge, per line per month	BS GA Rate Relative to GA 2/19 Rates	BS LA Rate Relative to GA 2/19 Rates
BS	GA	\$6.83		
BS	LA	\$6.83		
BS	GA Generic (no feature additive)	\$3.77	81%	81%
BS	GA Generic	\$6.05	13%	13%

Company	State	"UNE	"SYN	BS GA Cost	BS LA Cost
		MOD	Non-	Relative to GA	Relative to GA
		Loop	Cost	2/19 Rates	2/19 Rates
BS	GA	\$	3.65		
BS	LA	\$	4.36	1	
BS	GA Generic (no feature additive)	<b> </b> \$	3.65	0%	19%
BS	GA Generic	\$	3.65	0%	19%

Company	State	BS GA Cost Adjusted Relative Non- Loop Rates_ vs GA 2/19 Rates	BS LA Cost Adjusted Relative Non- Loop Rates_ vs GA 2/19 Rates
VZ	GA		
VZ	LA		
BS BS	GA Generic (no feature additive) GA Generic	81% 13%	52% -5%

# GA and LA\_ Cost per line\_UNE Adjusted from FCC SynMod

		Per Lin GA	e C	ost LA
End office switching + Signaling				
End office switching		\$ 3.09	\$	3.20
Signaling network elements	- [ :	\$ 0.11	\$	0.18
Total		\$ 3.21	\$	3.38
Transport Network Elements				
Common Transport	;	\$ 0.37	\$	0.89
Tandem switch		\$ 0.07	\$	0.09
Total	,	\$ 0.44	\$	0.98
UNE Platform_Non Loop		\$ 3.65	\$	4.36

#### Non-Loop Per-Line Charge Comparison

Non-Loop Comparison, using FCC volumes as standard

Element	GA	GA - Generic	LA
Local Switching Rate, per MOU			
Originating	\$0.001633	\$0.000791	\$0.001868
2 Terminating	0.001633	0.000791	0.001868
1	Included in	Included in	Included in
Signaling per Message	Switching rate	Switching rate	Switching rate
Common Trunk Port per MOU	\$0.000156	\$0.000158	\$0.000180
Originating	\$2.26	\$1.10	\$2.59
Terminating	\$1.77	\$0.86	\$2.03
Common Trunk Port+Signaling	\$0.34	\$0.34	\$0.39
Total Switching Usage Cost, per line per month	\$4.37	\$2.30	\$5.00
Line Side Port rate, per line per month	\$1.79	\$3.48	\$1.36
Total Switching Charge (excl DUF), per line per month	\$6.16	\$5.78	\$6.36
		\$3.50	
Total Non-Loop Usage Charge, per line per month	\$5.04	\$2.57	<b>\$</b> 5.47
Total Non-loop Charge (excl DUF), per line per month	\$6.83	\$6.05	\$6.83
Less Feature Port Additive	\$6.83	\$3.77	\$6.83

#### Notes/Sources:

- 1 Statewide average originating Local switching minutes of use rate exclusive of EO trunk port rate.
- 2 Statewide average terminating Local switching minutes of use rate exclusive of EO trunk port rate.
- 3 Signaling rate per message -- not a separate UNE-P rate element for these companies.
- 4 End Office Common Trunk Port rate per MOU -- a separate rate element for each of these companies.
- 5 Per table above, uses usage assumptions drawn from FCC PA 271 Order
- **6** Line port rate appropriate for UNE-P.

# **Comparison of DUF Cost**

### Calculated at Georgia Volumes

Compan y	State		GA Relative to other 271 states
BS	GA	\$ 2.96	0%
BS	LA *	\$ 1.37	116%
BS	GA Generic	\$ 1.40	112%

<sup>\*</sup> The LA DUF charge at LA volumes is \$1.02

#### Time Trend Analysis of Net Switch Investment per DEM

BS - GA	1992	1993	1994	1995	1996	1997	1998	1999	2000	2000 vs 1992 Overall Growth	2000 vs 1992 CAGR	Overall Growth	growth 1996 to 2002
Total DEM (Millions)	69,981	17,101	78,898	85,817	97,424	114,596	133,416	157,849	176.508	152%	12.3%	81%	
Total CO Switch EOP Gross Plant (\$M)	1,197,726	1,241,072	1,306,409	1,313,873	1,446,345	1,521,779	1,599,624	1,675,796		13276	12.370	0176	93%
Est Total CO Switch EOP Net Plant (\$M)		791,007	813,210	782,493	823,392	854,038			1,798,395	28%	3.2%	23%	
EST TOTAL CO SWITCH EOF NET FIAIT (\$10)	700,300	791,007	013,210	702,493	023,392	634,036	886,130	930,395	1,009,629	20%	3.2%	23%	26%
Net Switch Inv per DEM	\$ 0.01125	\$ 0.04626	\$ 0.01031	\$ 0.00912	\$ 0.00845	\$ 0.00745	\$ 0.00664	\$ 0.00589	\$ 0.00572	-49%	-8.1%	-32%	-40%
BS - LA	1992	1993	1994	1995	1996	1997	1998	1999	2000	2000 vs 1992 Overall Growth	2000 vs 1992 CAGR	2000 vs 1996 Overall Growth	Estimate growth 1996 to 2002
Total DEM (Millions)	45,164	10,694	47,837	50,975	54,013	59,510	69,097	78,174	86,097	91%	8.4%	59%	77%
Total CO Switch EOP Gross Plant (\$M)	748,836	774,790	787,304	791,133	824,913	865,753	903,062	929,840	959,217				
Est Total CO Switch EOP Net Plant (\$M)	492,016	493,819	490,079	471,169	469,616	485,869	500,262	516,243	538,510	9%	1.1%	15%	17%
Net Switch Inv per DEM	\$ 0.00703	\$ 0.02888	\$ 0.00621	\$ 0.00549	\$ 0.00482	\$ 0.00424	\$ 0.00375	\$ 0.00327	\$ 0.00305	-57%	-9.9%	-37%	-56%
										2000 vs 1992	2000 vs 1992	2000 vs 1996 Overall	Estimate growth 1996
BS - Total	1992	1993	1994	1995	1996	1997	1998	1999	2000	Overall Growth	CAGR	Growth	to 2002
Total DEM (Millions)	353,596	98,596	450,625	481,689	524,847	603,930	707,787	822,787	914,302	159%	12.6%	74%	101%
Total CO Switch EOP Gross Plant (\$M)	6,997,491	7,250,458	7,425,551	7,512,966	7,974,758	8,364,798	8,803,392	9,145,928	9,702,334				
CO Switch Depreciation Reserve	2,399,855	2,629,319	2,803,313	3,038,526	3,434,796	3,670,390	3,926,651	4,068,147	4,255,392				
CO Switch Reserve Ratio	34%	36%	38%	40%	43%	44%	45%	44%	44%	1			
Total CO Switch EOP Net Plant (\$M))	4,597,636	4,621,139	4,622,238	4,474,440	4,539,962	4,694,408	4,876,741	5,077,781	5,446,942	18%	2.1%	20%	24%
Net Switch Inv per DEM	\$ 0.0130	\$ 0.0469	\$ 0.0103	\$ 0.0093	\$ 0.0087	\$ 0.0078	\$ 0.0069	\$ 0.0062	\$ 0.0060	-54%	-9.3%	-31%	-49%

Source: GA and LA data from ARMIS 43-03 and 43-08, BS data is from ARMIS 43-02 and 43-08

Exhibit C-2

### Time Trend Analysis of Cable and Wire Net Investment per Line

BS - GA Total Access Lines Cable & Wire Facilities (eoy) Estimated Net C&W Plant	<b>1992</b> 3,213,802 2,940,760 1,689,888	1993 3,389,810 3,095,390 1,717,484	<b>1994</b> 3,622,315 3,238,754 1,726,813	<b>1995</b> 3,917,484 3,411,702 1,740,478	<b>1996</b> 4,343,728 3,579,643 1,739,592	1997 4,611,974 3,723,327 1,712,713	<b>1998</b> 5,375,278 3,899,962 1,693,947	<b>1999</b> 6,301,724 4,092,214 1,679,652	<b>2000</b> 7,566,846 4,408,873 1,740,292	135%	2000 vs 1992 CAGR	2000 vs 1996 Overall Growth	Estimate growth 1996 to 2002
Net C&W Plant per tot line	\$ 525.82	\$ 506.66	\$ 476.72	\$ 444.28	\$ 400.48	\$ 371.36	\$ 315.14	\$ 266.54	\$ 229.99	-56%	-8.8%	-43%	-59%
BS - LA	1992	1993	1994	1995	1996	1997	1998						
Total Access Lines	1,945,617	2,021,210	2,115,896	2,196,258	2,305,079	2,415,721	2,602,249	2,785,700	3,216,913	65%	1		
Cable & Wire Facilities (eoy)	2,019,748	2,077,516	2,125,614	2,182,765	2,231,881	2,286,178	2,340,710	2,393,497	2,459,223				
Estimated Net C&W Plant	1,160,635	1,152,714	1,133,318	1,113,537	1,084,623	1,051,631	1,016,686	982,412	970,717	-16%			
Net C&W Plant per tot line	\$ 596.54	\$ 570.31	\$ 535.62	\$ 507.02	\$ 470.54	\$ 435.33	\$ 390.70	\$ 352.66	\$ 301.75	-49%	-7.3%	-36%	-50%
BS - Total	1992	1993	1994	1995	1996	1997	1998	1999	2000	ı			
Total Access Lines	19,209,116	20,127,546	21,251,808	22,595,392	24,493,048	25,779,614	28,452,496	31,443,504	37,168,380	93%	)		
Cable & Wire Facilities (eoy)	17,784,490	18,560,260	19,255,148	20,057,012	20,836,040	21,620,126	22,478,464	23,311,660	24,470,990				
Acumulated Depreciation	7,564,751	8,262,061	8,988,839	9,824,936	10,710,392	11,674,969	12,714,952	13,743,375	14,811,681				
Net C&WF Plant	10,219,739	10,298,199	10,266,309	10,232,076	10,125,648	9,945,157	9,763,512	9,568,285	9,659,309	-5%	)		
C&W Depreciation Reserve	43%	45%	47%	49%	51%	54%	57%	59%	61%	ı			
Net C&W Plant per Total Line	\$ 532.03	\$ 511.65	\$ 483.08	\$ 452.84	\$ 413.41	\$ 385.78	\$ 343.15	\$ 304.30	\$ 259.88	-51%	-7.7%	-37%	-52%

Source: GA and LA data from ARMIS 43-03 and 43-08, BS data is from ARMIS 43-02 and 43-08

Exhibit C-3

#### Time Trend Analysis of Cable and Wire plus Circuit Equipment Net Investment per Line

										2000 vs 1992 Overali	2000 vs 1992	2000 vs 1996 Overall	Estimate growth 1996
BS - GA	1992	1993	1994	1995	1996	1997	1998	1999	2000	Growth	CAGR	Growth	to 2002
Total Access Lines	3,213,802	3,389,810	3,622,315	3,917,484	4,343,728	4,611,974	5,375,278	6,301,724	7,566,846	135%			
Cable & Wire Facilities (eoy)	2,940,760	3,095,390	3,238,754	3,411,702	3,579,643	3,723,327	3,899,962	4,092,214	4,408,873				
Estimated Net C&W Plant	1,689,888	1,717,484	1,726,813	1,740,478	1,739,592	1,712,713	1,693,947	1,679,652	1,740,292	3%			
Circuit Equipment	1,128,912	1,238,217	1,369,931	1,528,632	1,739,992	1,942,628	2,164,875	2,410,171	2,813,750				
Net Circuit Equipment Investment	659,720	682,151	703,760	739,108	786,584	822,255	854,328	917,725	1,067,352				
Net C&W +Circuit Inv per tot line	\$ 731.10	\$ 707.90	\$ 671.00	\$ 632.95	\$ 581.57	\$ 549.65	\$ 474.07	\$ 412.17	\$ 371.05	-49%	-7.3%	-36%	-50%
BS - LA	1992	1993	1994	1995	1996	1997	1998	1999	2000				
Total Access Lines	1,945,617	2,021,210	2,115,896	2,196,258	2,305,079	2,415,721	2,602,249	2,785,700	3,216,913	65%			
Cable & Wire Facilities (eoy)	2,019,748	2,077,516	2,125,614	2,182,765	2,231,881	2,286,178	2,340,710	2,393,497	2,459,223				
Estimated Net C&W Plant	1,160,635	1,152,714	1,133,318	1,113.537	1,084,623	1,051,631	1,016,686	982,412	970,717	-16%			
Circuit Equipment	645,063	676,279	714,476	772,545	828,274	885,715	940,277	1,004,570	1,110,592				
Net Circuit Equipment Investment	376,965	372,571	367,040	373,533	374,431	374,896	371,063	382,512	421,286				
Net C&W +Circuit Inv per tot line	\$ 790.29	\$ 754.64	\$ 709.09	\$ 677.09	\$ 632.97	\$ 590.52	\$ 533.29	\$ 489.98	\$ 432.71	-45%	-6.5%	-32%	-44%
BS - Total	1992	1993	1994	1995	1996	1997	1998	1999	2000				
Total Access Lines	19,209,116	20,127,546	21,251,808	22,595,392	24,493,048	25,779,614	28,452,496	31,443,504	37,168,380	93%			
Cable & Wire Facilities (eoy)	17,784,490	18,560,260	19,255,148	20,057,012	20,836,040	21,620,126	22,478,464	23.311.660	24,470,990	3370			
Acumulated Depreciation	7,564,751	8,262,061	8,988,839	9,824,936	10,710,392	11,674,969	12,714,952	13,743,375	14,811,681				
Net C&WF Plant	10,219,739	10,298,199	10,266,309	10,232,076	10,125,648	9,945,157	9,763,512	9,568,285	9,659,309	-5%			
C&W Depreciation Reserve	43%	45%	47%	49%	51%	54%			61%	• ,.			
Circuit Equipment	6,564,061	7,071,147	7,669,117	8,300,929	9,177,316	10,064,521	10,993,265	11,928,394	13,505,226				
Acc. Dep: Circuit Equipment	2,728,120	3,175,554	3,729,343	4,287,354	5,028,601	5,804,518	6,654,975	7,386,398	8,382,231				
Net Circuit Equipment Investment	3,835,941	3,895,593	3,939,774	4,013,575	4,148,715	4,260,003	4,338,290	4,541,996	5,122,995				
C&W Depreciation Reserve	42%	45%	49%	52%	55%	58%			62%				
Net C&W + Circuit Equipment Inv per Total Line	\$ 731.72	\$ 705.19	\$ 668.46	\$ 630.47	\$ 582.79	\$ 551.02	\$ 495.63	\$ 448.75	\$ 397.71	-46%	-6.5%	-32%	-44%

Source: GA and LA data from ARMIS 43-03 and 43-08, BS data is from ARMIS 43-02 and 43-08

#### Exhibit D-1

# **Connectivity Margin for Bell South Louisiana**

COSTS	Statewide Average	Zone 1	Zone 2	Zone 3
Zone weights		67%	26%	7%
Loop	\$16.98	\$11.77	\$22.39	\$48.26
Port	\$1.36	\$1.36	\$1.36	\$1.36
Usage	\$5.62	\$5.62	\$5.62	\$5.62
DUF	\$1.02	\$1.02	\$1.02	\$1.02
Platform - Recurring Cost	\$24.97	\$19.77	\$30.39	\$56.26
Amortization of NRC Fee	\$0.19	\$0.19	\$0.19	\$0.19
Total Platform (w/NRC)	\$25.16	\$19.96	\$30.58	\$56.45

REVENUES	RES @ SWBT
Basic Local Svc	•
Zone 1	\$12.57
Zone 2	\$11.79
Zone 3	\$11.36
Basic Local Svc -Statewide	\$12.29
Other Revenue Sources	
Features	\$9.60
Sub. Line Chg.	\$5.00
Access	\$0.90
<u>Total Revenue</u>	
Zone 1	\$28.08
Zone 2	\$27.30
Zone 3	\$26.87
Total Revenue -Statewide	\$27.80

MARGINS_RES @ SWBT	\$/Line	%	0.67
Zone 1	\$8.12	29%	\$8.79
Zone 2	(\$3.28)	-12%	(\$2.61)
Zone 3	(\$29.58)	-110%	(\$28.91)
Residence Statewide	\$2.63	9%	\$3.30

# BellSouth Louisiana UNE-P: Current UNE Rates

09/21/01 Order Dkt# U24714

	By Density Zone	Urban	Suburban	Rural	Statewide
Α.	Residence Line Distribution	67%	26%	7%	100%
В.	Loop	\$11.77	\$22.39	\$48.26	\$16.98
C.	Analog Line Side Port	\$1.36	\$1.36	\$1.36	\$1.36
D.	EO Switching				\$ 0.001868
E.	EO Switch Port				\$ 0.000180
F	Common Transport - Per Mile, Per M	IOU			\$ 0.000003
G	Common Transport - Fac. Term, Per	MOU			\$ 0.000375
Η	Tandem switching				\$ 0.000107
	Tandem switching trunk port				\$ 0.000222
J	ADUF - Message Processing, per me	essage			\$ 0.00182500 *
Κ	ADUF - Data Transmission(Connect:	Direct), per r	nessage		\$ 0.00012147 *
L	ODUF - Recording, per Message				\$ 0.00001170 *
М	ODUF - Message Processing, per me	essage			\$ 0.00244600 *
Ν	ODUF - Data Transmission(Connect:	Direct). Per	message		\$ 0.00010122 *

<sup>\*</sup> DUF rates revised as of BST SGAT Revision 12/06/01

#### Residential Toll Conversation MOU Per line Per Month

Average Residential Toll Minutes 4Q00 - 3Q01

Verizon		Louisiana
Intra-Lata	Intra-State	21.6
}	Inter-State	-
Inter-Lata	Intra-State	18.7
	Inter-State	62.0

Source: TNS ReQuest Market Monitor and Bill Harvesting Study

#### **ARMIS-Based Local DEM Per line Per Month**

	Per Month	Total DEM per line CAGR: 2000 vs 1998	Per Month
2-Way DEM per	2,336	11.4%	2,898
1-Way DEM per	1,168		1,449

<sup>\*</sup> As local DEM was not yet reported for 2000, the 1999 split of intrastate between toll and local was used.

Exhibit D-4

Bell South_Louisiana UNE Unit Cost Development																		
				Local				Intrala	ta t	oll		Intrastate	Inte	rLATA		Interstate	Inte	rLATA
				interswi	itch i	local		Up to 1)	(C F	POP								
		Intraswitch					Inti	ralata Toll	In	tralata Toll	Ξ	nteriata Toli	In	terlata Toll	Inte	rlata Toll	In	terlata Toll
	Rates	local	-	Direct		Tandem	l	Direct		Tandem		Direct		Tandem		Direct		Tandem
EO Switching	\$ 0.0018680	1		1		1		1		1		1		1		1		1
EO Switch Port	\$ 0.0001800			1		1		1		1				1				1
Common Xport - Blended	\$ 0.0004068			1		1		1		1				1				1
Tandem switching	\$ 0.0001067					1				1	İ			1				1
Term. EO Switching	\$ 0.0018680			1		1		1		1				:				
Term. EO Switch Port	\$ 0.0001800			1		1		1		1				:	ł			
Tandem switching trunk port	\$ 0.0002220					2				2				1				1
	•	\$ 0.001868	0   9	\$ 0.0045028	\$	0.0050535	\$ (	0.0045028	\$	0.0050535	\$	0.0018680	\$	0.0027835	\$0.0	0018680	\$	0.0027835
MOU		507		923		19		17		4		30		7		99		25
Cost per Line		\$ 0.94	7 5	\$ 4.156	\$	0.095	\$	0.078	\$	0.022	\$	0.056	\$	0.021_	\$	0.185	\$	0.069

MOU Assumptions	Outbound	Inbound	total	intraoffice	tandem
Local	1,449	-	1,449	35%	2%
IntraLATA Toll	22	22	43	0%	20%
Intrastate InterLATA	19	19	37	0%	20%
Interstate InterLATA	62	62	124	0%	20%
Total	1,551	102	1,654		

# **UNE Usage Cost Per Line by Service**

Bell South_Louisiana					
	% MOU	Į	JNE Cost	Cost	per Line
Local					
Intraswitch local	35%	\$	0.001868		
Interswitch direct local	64%	\$	0.004503		
Interswitch tandem local	1%	\$	0.005054		
		\$	0.003588	\$	5.20
IntraLATA Toll					
Up to IXC POP					
intralata toll direct	80%	\$	0.001868		
intralata toll tandem	20%	\$	0.002784		
		\$	0.002051	\$	0.09
Intrastate InterLATA					
interlata toll direct	80%	\$	0.001868		
interlata toll tandem	20%	\$	0.002784		
		\$	0.002051	\$	0.08
Interstate InterLATA					
interlata toll direct	80%	\$	0.001868		
interlata toll tandem	20%	\$	0.002784		
		\$	0.002051	\$	0.25
Total Usage Per Line				\$	5.62

### Bell South\_Louisiana DUF Charges

Daily Usage Feed (DUF)	LA		
ADVE Massage Proposing nor massage	Rates	MOU/Record	ds
ADUF - Message Processing, per message ADUF - Data Transmission(Connect:Direct), per message	\$0.001825 \$0.000121	32	\$0.06
ODUF - Recording, per Message	\$0.000012	0195 162	
ODUF - Message Processing, per message	\$0.002446		
ODUF - Data Transmission(Connect:Direct). Per message	\$0.000101	373 0.003 1492	\$0.95
DUF Total			\$1.02

DUF rates revised as of BST SGAT Revision 12/06/01

#### Bell South\_Louisiana

ACCESS REVENUE CALCULATION								
			Access					
			Revenue per					
	MOUs	RATE	Line					
Interstate Access	124	\$ 0.00276	\$0.34					
Intrastate Access	<u>37</u>	\$ 0.00697	<u>\$0.26</u>					
Total InterLATA	162		\$0.60					
IntraLATA Toll	43	\$ 0.00697	\$0.30					
Total			\$0.90					

WITHOUT DEDICATED TRANSPORT								
INTE	INTERSTATE							
ORIGINATING	TERMINATING	ORIGINATING	TERMINATING					
0.002756	0.002756	0.006968	0.006968					

Exhibit D-8

### BellSouth LA\_Basic Local Rates

Local Rate			# of Wire		# of
Zones	1	FR Rate	Centers	# of Lines	Exchanges
1	\$	10.97	84	180,432	79
2	\$	11.18	12	42,986	11
3	\$	11.39	8	52,553	8
4	\$	11.60	13	51,111	12
5	\$	11.81	12	51,318	7
6	\$	12.02	5	39,168	5
7	\$	12.23	7	68,649	7
8	\$	12.43	8	75,954	8
9	\$	12.64	79	1,120,321	38
Totals/Avg.	\$	12.29	228	1,682,491	175

Local Rate Effective Date

10/3/2000

Average Monthly Feature Revenue Per Bill	\$ 9.60
Source: TNS Bill Harvesting Study, 4Q00 - 3Q01	

### BellSouth LA\_Basic Local and UNE Loop Rates by UNE Zone

		UNE			•		% of
		Loop		Ave	rage Local	# of Wire	Total
UNE Rate Zone	Res Lines	Price		Rate		Centers	Lines
1	1,132,622	\$	11.77	\$	12.57	57	67%
2	437,033	\$	22.39	\$	11.79	94	26%
3	112,836	\$	48.26	\$	11.36	77	7%
Totals/Avg.	1,682,491	\$	16.98	\$	12.29	228	100%